



REV-01

Stafford County Department of Public Works Building & Permits Division

Minimum Standards for Commercial Construction

Construction documents shall be dimensioned and drawn upon suitable material (no pencil or other readily changeable medium) and should be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of the 2009 Virginia Uniform Statewide Building Code (USBC) and relevant laws as addressed within this document with appropriate emphasis on the following:

- ☐ Life Safety
- ☐ Structural Integrity
- ☐ Barrier-free accessibility
- ☐ Building codes compliance
- ☐ Definition of scope of work

ALL COMMERCIAL NEW AND COMMERCIAL CHANGE PACKAGE SUBMITTALS THAT INVOLVE STRUCTURAL FOOTINGS ARE MANDATED TO BE ACCOMPANIED BY A SOILS REPORT; NO EXCEPTIONS.....

Plan Submittal Requirements:

Buildings / Structures < 10,000 SF

- ☐ One full set of plans drawn to no less than 1/8 inch scale; for each level
- ☐ Bearing original (wet) seal, signature and date of a registered design professional (RDP); if mandated
- ☐ One set of specifications if all information necessary to ensure compliance is not provided on plans
- ☐ One computer disc containing the specifications and the full set of plans as submitted that includes the scanned images of any mandated RDP seals with the signature and date saved electronically in the PDF format.

Buildings / Structures \geq 10,000 SF

- ☐ One full set of plans drawn to no less than 1/8 inch scale; for each level
- ☐ Bearing original (wet) seal, signature and date of a registered design professional (RDP); if mandated
- ☐ One set of specifications **if** all information necessary to ensure compliance is not provided on plans
- ☐ Two computer discs containing the specifications and the full set of plans as submitted that includes the scanned images of any mandated RDP seals with the signature and date saved electronically in the PDF format

The type and number of drawings within each set will depend greatly upon the size, nature and complexity of the project. The following is the recommended standard for most building projects. Additions and renovations, and some other project types may not require all of the following components for plan submittal and review for permit.

See separate document entitled “Minimum Standards for Registered Design Professionals” to determine if a registered design professional (RDP) is mandated and the seal requirements.

Pre-Engineered Buildings and/or Structural Components:

Sealed, signed and dated plans (original signatures and dates) from the manufacturer/fabricator must be submitted with projects that use pre-engineered buildings and structural components. Design information provided shall include data as required in IBC Section 1603; or review can not be conducted.

Reviewer's Comment Revisions:

A written explanation for each revision that was initiated by the plan reviewer's failed comments must accompany the revised plans that have all revised areas clearly identified by revision clouds that are linked to the dates of each revision in the title block of the plans. This will allow reviewer to quickly identify changes and expedite the plan review process.

Addenda and Changes:

It is the responsibility of the Primary Registered Design Professional to provide notification of changes throughout the project. Any material substitutability or alternate methods of construction must be first approved by the architect or engineer of record and then clearly indicated on plans and specification booklet(s) with revision clouds and dates. These amended plans, along with computer disc, must be submitted to the Department of Public Works for review in package quantities the same as original submittal with plan review fees due upon pickup of the revised jobsite plans.

Miscellaneous:

- ◆ Plan review fees paid prior to the review process with all other fees due prior to issuance of permit
- ◆ Separate Fire Permits and design documents are required for any work involving:
 - Fire alarm systems
 - Fire suppression systems
 - Smoke control systems
 - Underground fire lines or standpipes
 - Delayed egress systems or other life safety systems
 - Contact Stafford County Fire and Rescue Department for more information

CONTACT INFORMATION ~ STAFFORD COUNTY:

Department	Phone Number
Zoning	540-658-8668
Planning	540-658-8668
Grading / Erosion / Stormwater Management	540-658-8830
Commercial Plan Examiners	540-658-8650
Permit Technicians	540-658-8650
Building Inspectors	540-658-8950
Fire Marshal	540-658-8558

Adopted Code:

Stafford County, Virginia

The Virginia Uniform Statewide Building Code (USBC) is a state regulation promulgated by the Virginia Board of Housing and Community Development, a Governor-appointed board, for the purpose of establishing minimum regulations to govern the construction and maintenance of buildings and structures.

The provisions of the USBC are based on nationally recognized model building and fire codes published by the International Code Council, Inc. The model codes are made part of the USBC through a regulatory process known as incorporation by reference. The USBC also contains administrative provisions governing the use of the model codes and establishing requirements for the enforcement of the code by the local building departments and other code enforcement agencies.

In keeping with the designations of the USBC used previously, since the 2009 editions of the International Codes are incorporated by reference into this version of the USBC, it is known as the 2009 edition of the USBC.

USBC 2009

- 2009 International Residential Code (IRC)
- 2009 International Building Code (IBC)
- 2009 International Fire Prevention Code (IFC)
- 2009 International Fuel-Gas Code (IFGC)
- 2009 International Plumbing Code (IPC)
- 2009 International Mechanical Code (IMC)
- 2009 International Energy Conservation Code (IECC)
- 2009 International Existing Building Code (IEBC)
- 2008 National Electrical Code (NEC)
- 2003 ANSI A117.1 Accessible Standards

The Virginia Uniform Statewide Building Code can be downloaded at no cost from www.vbcoa.org.

Each of the new State of Virginia Building Codes are available in a read only format at www2.iccsafe.org/states/Virginia/.

These codes are specific to Virginia and have all of the USBC amendments incorporated within each of the individual International Codes for simplicity.

GEOGRAPHICAL & CLIMATE DESIGN CRITERIA ~ STAFFORD COUNTY:

Ground Snow Load	25 psf
Wind Speed/3-Second Gust	90 mph
Wind/Fastest Mile	76 mph
Frost Depth	24"
Earthquake Spectral Response Acceleration/At Short Periods	0.16
Residential Seismic Design Category	"B"
Weathering Probability for Concrete	Severe
Termite Infestation Probability	Moderate to Heavy
Decay Probability	Moderate
Ice Shield Underlayment Required	Yes
Flood Hazards/Date of Entry into National Flood Ins. Program	11/19/1980
Winter Design Temperature	15°
Air Freezing Index	≤1500°F
Mean Annual Temperature	50°F

~ Stafford County Commercial Plan Review Checklist ~

The following is a checklist of items that must be indicated on commercial plans. The list is not an all-exhaustive list and does not take the place of the 2009 Virginia Uniform Statewide Building Code. This is simply a guideline indicating information typically absent from plans submitted for plan review. It is not a substitute for, nor does it include everything indicated on a complete set of building plans. Checking the set of plans against this list of commonly omitted items will help expedite the plan review process and could prevent the costly delays for additional plan reviews.

When commercial plans fail a review the applicant is responsible for providing both the revised plans (same requirements and number of full sets as original submittal) and the updated computer discs (same requirements and number as original submittal) for the additional review process. Plans submitted for review are not returned after a failed plan review regardless of quantities provided for that failed plan review. To clarify, full sets of plans and not just the revised sheets must be submitted for each additional plan review process.

Again, a written explanation for each revision that was initiated by the plan reviewer's failed comments must accompany the revised plans that have all revised areas clearly identified by revision clouds that are linked to the dates of each revision in the title block of the plans. This will allow reviewer to quickly identify changes and expedite the plan review process.

Cover Sheet:

- ☐ Project Identification
- ☐ Project address and location map
- ☐ Listing of design professionals with email, phone, fax and addresses for each
- ☐ The Prime professional (the design professional who is responsible for project coordination)
- ☐ Index of all plans included within the set being submitted
- ☐ Design Criteria – “Designed in Compliance with Virginia Uniform Statewide Building Code, 2009”
- ☐ Design Criteria - Occupancy group(s)
 - All occupancies within must be listed
 - Not just by group, but individual group if applicable, such as A-1, A-2, A-3, etc
 - If an Accessory to the main, specify as such with calculations to support as such
 - If Incidental to the main, specify as such
 - If Mixed-Use specify as such along with Separated or Non-Separated
- ☐ Design Criteria - Type(s) of construction
- ☐ Design Criteria - Square footage of building area provided versus Table 503’s allowable building area square footage (provide area modification calculations, if applicable)
- ☐ Design Criteria - Height & number of stories provided versus Table 503’s allowable height & number of stories (provide height and number of stories modification calculations, if applicable)
- ☐ Design Criteria - Occupant load(s)
 - Provide overall occupant load, and
 - Provide occupant load for each floor, and group
 - Provide occupant load for each individual occupancy
- ☐ Design Criteria - Capacity of means of egress
- ☐ Design Criteria - Fire sprinkler, fire alarm and other fire protection or life safety system requirements
- ☐ Structural Design Information as referenced in IBC Section 1603. Where applicable, illustrate compliance with the Statewide Fire Prevention Code including any fire department access signage, emergency planning and preparedness and any required hazardous material processing, handling or storage components.

Additional information recommended on the cover sheet is the square footage measured from the exterior face of all exterior walls that includes square footage from under all covered areas such as drive through canopies, etc. and a complete description of work from the RDP’s knowledge.

The reason for this recommendation is to provide guidance to the applicant that is responsible for providing such information on the application at time of submittal. The above-mentioned square footage is the area that the fees are obtained from by calculation and are mandated for all permits.

Architectural Site Plan:

- ☐ Provide the architectural site plan drawn to non less than 1:20 scale
- ☐ Indicate the northern orientation on above-mentioned site plan

- ☐ Illustrate & identify proposed new structure
- ☐ Illustrate & identify property lines with dimensions
- ☐ Provide dimensions from the proposed new structure to property lines

- ☐ Illustrate & identify existing buildings or structures on property
- ☐ Provide dimensions from the proposed structure to any existing structures on the property

- ☐ Illustrate and identify all streets, easements and setbacks; setbacks to be dimensioned

- ☐ Illustrate required parking, including handicapped accessible parking and handicapped accessible route(s) with dimensions and details

Life Safety & Egress Plan (for each level):

- ☐ Provide general information box with type of construction

- ☐ Provide general information box with overall occupancy use group
- ☐ Provide general information box with overall square footage
- ☐ Provide general information box with overall occupant load
- ☐ Provide general information box with occupant load specified for each floor
- ☐ Provide general information box with sprinkler type specified; or note non-sprinklered
- ☐ Provide general information box with fire alarm system specified; or note if none provided

- ☐ Provide the life safety & egress site plan at minimum of 1:20 scale
- ☐ Illustrate existing and proposed fire hydrants including path of piping
- ☐ Illustrate the fire apparatus access route

- ☐ Provide life safety & egress floor plan(s) for all floor levels including basements, mezzanines & useable attic spaces; no less than 1/8 inch scale

- ☐ Provide identification number for each room
- ☐ Provide identification number for each corridor
- ☐ Provide identification number for each stairway

- ☐ Provide occupant load for each room
- ☐ Provide square footage for each room
- ☐ Provide intended use for each room
- ☐ Provide occupancy use group for each room if different from overall (specific, such as, A-1, A-2, etc)

- ☐ Provide widths for the means of egress to include as a minimum corridors, stairways, doors, stairs, etc.

- ☐ Provide clear indicators for doors with panic hardware
- ☐ Provide both mandated and provided capacity at all means of egress doors with directional arrows; for each floor level
- ☐ Illustrate and identify the most remote means of egress travel path and distance
- ☐ Illustrate and identify accessible egress routes
- ☐ Illustrate and identify areas of refuge with dimensions and details; if applicable

- ☐ Illustrate and identify all emergency exit signs with directional indicators and backup power specified, if mandated
- ☐ Illustrate and identify all emergency lighting with backup power specified, if mandated
- ☐ Illustrate and identify all exit discharge illumination with backup power specified, if mandated

- ☐ Illustrate and identify all fire resistance rated partitions as fire partitions and indicate the rating
- ☐ Illustrate and identify all fire resistance rated walls as fire barriers or fire walls and indicate the rating
- ☐ Illustrate all fire resistance rated doors/frames and indicate the rating
- ☐ Illustrate all fire resistance rated windows/frames and indicate the rating
- ☐ Illustrate all fire resistance rated shaft enclosures as fire barriers and indicate the rating
- ☐ Illustrate all fire resistance rated horizontal assemblies and the ratings
- ☐ Illustrate all fire resistance rated exterior walls and indicate the ratings
- ☐ Indicate openings with ratings that mandate protection in the above-mentioned exterior walls

- ☐ Provide UL or GA design numbers, or other approved design data from a nationally recognized testing laboratory for all the above-mentioned fire resistance rated assemblies on a full size plan sheet with no editing other than clearly indicating the selected options by the RDP by placing a single line strike through all irrelevant text; no exceptions.

- ☐ Illustrate and identify all locations of manual fire alarm boxes (pull stations)
- ☐ Illustrate and identify all locations of portable fire extinguishers and specify ratings
- ☐ Illustrate and identify all occupant-use hose stations
- ☐ Illustrate and identify all alarm annunciators and controls

This plan must be all inclusive with all of the above-mentioned information provided directly on this/these life safety & egress plan(s) regardless of the information being located on any other sheets within the set; no exceptions.

Floor Plan (for each level):

- ☐ Provide general information box with type of construction
- ☐ Provide general information box with overall occupancy use group
- ☐ Provide general information box with overall square footage
- ☐ Provide general information box with overall occupant load
- ☐ Provide general information box with occupant load specified for each floor
- ☐ Provide general information box with sprinkler type specified; or note non-sprinklered
- ☐ Provide general information box with fire alarm system specified; or note if none provided

- ☐ Provide floor plan(s) no less than 1/8 inch scale for all floor levels including basements, mezzanines & useable attic spaces

- ☐ Illustrate all plumbing fixtures, fixed seating, tables and chairs

- ☐ Provide identification number for each room
- ☐ Provide identification number for each corridor
- ☐ Provide identification number for each stairway

- ☐ Provide occupant load for each room
- ☐ Provide square footage for each room
- ☐ Provide intended use for each room
- ☐ Provide occupancy use group for each room if different from overall (specific, such as, A-1, A-2, etc)

- ☐ Provide overall dimensions and locations of structural elements and openings
- ☐ Provide overall dimensions and locations of all partitions, walls, corridors, etc.
- ☐ Provide dimensions and details for all handicapped accessibility features

- ☐ Illustrate doors with references to a door schedule that includes frame, hardware and fire ratings
- ☐ Illustrate windows with references to a window schedule

- ☐ Illustrate and identify all fire resistance rated partitions as fire partitions and indicate the rating
- ☐ Illustrate and identify all fire resistance rated walls as fire barriers or fire walls and indicate the rating
- ☐ Illustrate all fire resistance rated doors/frames and indicate the rating; not label
- ☐ Illustrate all fire resistance rated windows/frames and indicate the rating
- ☐ Illustrate all fire resistance rated shaft enclosures as fire barriers and indicate the rating
- ☐ Illustrate all fire resistance rated horizontal assemblies and the ratings
- ☐ Illustrate all fire resistance rated exterior walls and indicate the rating
- ☐ Indicate openings with ratings that mandate protection in the above-mentioned exterior walls

- ☐ Provide approved firestop details for all penetrations to or through fire resistance rated assemblies

- ☐ Provide UL or GA design numbers, or other approved design data from a nationally recognized testing laboratory for all the above-mentioned fire resistance rated assemblies on a full size plan sheet with no editing other than clearly indicating the selected options by the RDP by placing a single line strike through all irrelevant text; no exceptions.

Foundation Plan:

- ☐ Provide foundation plan drawn to no less than 1/8 inch scale
- ☐ Indicate size, locations, and thickness of footings and foundations with details
- ☐ Provide specified compressive strength of concrete
- ☐ Provide specified grade (strength) and size for reinforcement
- ☐ Provide placement requirements for reinforcement with details
- ☐ Provide details for reinforcement (splices, anchorage, mechanical connections, etc)
- ☐ Show location of construction, control, and isolation joints with details
- ☐ Show embedded anchoring such as anchor bolts, hold-downs, seismic straps and column base plates
- ☐ Indicate the method for diverting water away from the foundation
- ☐ Provide geotechnical criteria and assumptions used for foundation design
- ☐ Provide soils report for all structural footings

Structural Plans:

- ☐ Provide structural floor plan(s) drawn to no less than 1/8 inch scale
- ☐ Provide live load and all other load data used in the structural design
- ☐ Provide size and location of structural elements, method of attachment, and material specifications
- ☐ Provide specified grade (strength) and sizes for horizontal and vertical reinforcement
- ☐ Provide placement requirements for horizontal and vertical reinforcement
- ☐ Provide detailing requirements for reinforcement (splices, anchorage, mechanical connections, etc)
- ☐ Provide framing plan for the roof structure
- ☐ Provide method for support of openings

Exterior Elevations:

- ☐ Provide exterior elevations for all sides drawn to no less than 1/4 inch scale
- ☐ Illustrate and indicate vertical dimensions and heights of structure
- ☐ Illustrate and indicate vertical dimensions and heights of openings
- ☐ Illustrate and indicate exterior construction and/or siding materials

Building Sections and Wall Sections:

- ☐ Provide building sections drawn to no less than 1 inch scale
- ☐ Provide dimensions of all heights
- ☐ Identify construction materials
- ☐ Identify non-rated and fire rated assemblies and fire rated penetrations
- ☐ Provide UL or GA design numbers or other design data from a nationally recognized testing laboratory for fire rated partitions, firewalls, floor/ceiling assemblies and ceiling/roof assemblies
- ☐ Provide UL system number for penetrations in rated assemblies
- ☐ Provide the UL fire resistant joint system numbers
- ☐ Identify all exterior wall covering materials and means of fastening or attachment
- ☐ Identify type(s) of wall covering, floor coverings, and ceiling finish materials
- ☐ Identify roofing materials to include fasteners, roof covering, underlayment, flashings, sheathing, drip-edge materials and ice-shield

Plumbing System:

- ☐ Provide a plumbing site plan drawn to no less than 1:20 scale
- ☐ Illustrate on the plumbing site plan points of connection to potable water supply, the building water distribution system and the path of piping with minimum burial depth clearly indicated
- ☐ Indicate on the plumbing site plan the maximum develop length of the water service piping (meter to within 30" of building)
- ☐ Indicate on the plumbing site plan the water demand in water supply fixture units
- ☐ Indicate on the plumbing site plan the piping material, piping ASTM numbers and size of water service piping
- ☐ Illustrate on the plumbing site plan points of connection to the public sanitary sewer system, the sanitary building drain and the path of piping with minimum burial depth clearly indicated; include all cleanouts and manholes
- ☐ Indicate on the plumbing site plan the maximum develop length of the sanitary building sewer piping (public sanitary sewer system to within 30" of building)
- ☐ Indicate on the plumbing site plan the piping material, piping ASTM numbers and size of sanitary building sewer piping
- ☐ Illustrate on the plumbing site plan the connection to the public storm sewer system or the onsite stormwater disposal system
- ☐ Illustrate on the plumbing site plan points of connection to the above-mentioned stormwater disposal system, the storm building drain and the path of piping with minimum burial depth clearly indicated
- ☐ Indicate on the plumbing site plan the maximum develop length of the storm building sewer piping (point of disposal to within 30" of building)
- ☐ Indicate on the plumbing site plan the piping material, piping ASTM numbers and size of storm building sewer piping
- ☐ Provide plumbing floor plan(s) drawn to no less than 1/8 inch scale
- ☐ Indicate the plumbing code edition that plans are designed in compliance with (VA USBC 2009)
- ☐ Illustrate and identify all fire resistance rated assemblies and the ratings; to include as a minimum rated partitions, rated walls, rated shaft enclosures, rated horizontal assemblies (floor penetrations) and rated exterior walls
- ☐ Provide approved fire-stop details for all penetrations to or through fire resistance rated assemblies
- ☐ Illustrate and identify all plumbing fixtures, appliances, devices, etc; provide fixture schedule
- ☐ Clearly label fixtures intended for food preparation to ensure indirect waste connections
- ☐ Clearly label fixtures that will be drained to a grease interceptor
- ☐ Clearly distinguish new work from existing
- ☐ Illustrate the clear floor space for all handicap accessible plumbing fixtures
- ☐ Illustrate the handicap accessible elevation details and dimensions for all plumbing fixtures
- ☐ Provide plumbing roof plan drawn at no less than 1/8 inch scale
- ☐ Illustrate on plumbing roof plan primary roof drains, secondary roof drains and scuppers if applicable
- ☐ Provide details for the above primary and secondary roof drains and scuppers
- ☐ Provide material, piping ASTM numbers & size of conductors & leaders along with roof area served
- ☐ Provide details for conductors & leaders methods of support and bracing
- ☐ Illustrate on plumbing roof plan locations of exhaust terminations, sanitary sewer vent outlets, and intakes
- ☐ Provide a water distribution diagram
- ☐ Provide a sanitary sewer isometric
- ☐ Provide specifications for fixtures, piping, shutoff valves, slopes, materials and sizes
- ☐ Provide specifications and details for water heater(s) T/P relief valve, auxiliary pan drain lines, thermal expansion device and check valves
- ☐ Provide specifications and installation details for traps and interceptors
- ☐ Provide specifications and installation details for pressure booster pumps
- ☐ Provide specifications & installation details for backflow device(s); contact Utilities for backflows in mains @ 658-5200

Mechanical System:

- ☐ Provide a mechanical floor plan(s) drawn to no less than 1/8 inch scale
- ☐ Indicate the mechanical code edition that plans are designed in compliance with (VA USBC 2009)
- ☐ Illustrate and identify all fire resistance rated assemblies and the ratings; to include as a minimum rated partitions, rated walls, rated shaft enclosures, rated horizontal assemblies and rated exterior walls
- ☐ Provide approved fire-stop details for all penetrations to or through fire resistance rated assemblies
- ☐ Illustrate and identify all components of the heating system
- ☐ Illustrate and identify all components of the air conditioning system
- ☐ Illustrate and identify all components of the ventilation / exhaust system
- ☐ Provide an equipment schedule that includes the type of units, cooling/heating capacity (btu/hr), fan capacity (cfm) and heating type
- ☐ Illustrate and identify all components of commercial hood systems
- ☐ Provide details and specifications for the above-mentioned commercial hood systems
- ☐ Illustrate and identify passive and active smoke control systems, if applicable
- ☐ Provide duct material type, sizes, mounting details, means of attachment, and air device sizes
- ☐ Illustrate and identify means of support for ducts, equipment, condensation drainage systems and fan shutdown requirements
- ☐ Illustrate and identify all smoke dampers, fire dampers, combination smoke & fire dampers and ceiling radiation dampers
- ☐ Illustrate all mechanical ventilation calculations for outdoor air rate and exhaust rates mandated based on each space's minimum requirements as determined by its specific occupancy classification as determined by **Table 403.3 of the VA USBC, 2009 edition**; all work must be illustrated to include all formulas with dimensions and square footages indicated for easy verification of compliance; no exceptions

Electrical System:

- ☐ Provide an electrical power floor plan(s) drawn to no less than 1/8 inch scale
- ☐ Provide an electrical lighting floor plan(s) drawn to no less than 1/8 inch scale
- ☐ Indicate the electrical code edition that plans are designed in compliance with (VA USBC 2009)
- ☐ Illustrate and identify all fire resistance rated assemblies and the ratings; to include as a minimum rated partitions, rated walls, rated shaft enclosures, rated horizontal assemblies and rated exterior walls
- ☐ Provide approved fire-stop details for all penetrations to or through fire resistance rated assemblies
- ☐ Show point of connection to utility
- ☐ Provide a single line electrical riser diagram
- ☐ Indicate conductor(s) type; example: copper, aluminum, copper-clad aluminum
- ☐ Indicate conductor(s) insulation type; example: THHN, THWN, USE
- ☐ Indicate conductor(s) wire gauge; example: #10, #12, #14
- ☐ Indicate conduit(s) type, if applicable
- ☐ Indicate conduit(s) size, if applicable
- ☐ Indicate conduit(s) methods of support and spacing, if applicable
- ☐ Indicate conduit(s) burial depths with conditions above indicated, if applicable
- ☐ Illustrate branch circuits
- ☐ Illustrate feeder circuits
- ☐ Illustrate and indicate service means of disconnection
- ☐ Illustrate and indicate grounding electrode system details and specifications
- ☐ Illustrate and indicate equipment means of disconnection
- ☐ Illustrate and indicate equipment grounding details and specifications
- ☐ Provide electrical panel specifications, ratings, and schedules
- ☐ Provide electrical fixture schedules

Electrical Site Work:

- ☐ Provide an electrical site plan drawn to no less than 1:20 scale, if applicable
- ☐ Illustrate on the electrical site plan all electrical devices, points of connection to building power supply and the path between and conditions above ground if below grade installations
- ☐ Indicate conductor material, conductor insulation, conductor gauge and any ampacity adjustments due to ambient temperature and/or current-carrying conductor quantities and/or extreme distances (voltage drop), if applicable
- ☐ Indicate conduit type, size and burial depths, if applicable

Low Voltage Electrical System:

- ☐ Provide general information box with type of construction
- ☐ Provide general information box with overall occupancy use group
- ☐ Provide general information box with overall square footage
- ☐ Provide general information box with overall occupant load
- ☐ Provide general information box with occupant load specified for each floor
- ☐ Provide general information box with sprinkler type specified; or note non-sprinklered
- ☐ Provide general information box with fire alarm system specified; or note if none provided

- ☐ Provide low voltage electrical floor plan(s) no less than 1/8 inch scale for all floor levels including basements, mezzanines & useable attic spaces
- ☐ Indicate the electrical code edition that plan(s) are designed in compliance with (VA USBC 2009)

- ☐ Illustrate and identify all fire resistance rated assemblies and the ratings; to include as a minimum rated partitions, rated walls, rated shaft enclosures, rated horizontal assemblies and rated exterior walls
- ☐ Provide approved fire-stop details for all penetrations to or through fire resistance rated assemblies

- ☐ Provide identification number for each room, corridor and stairway
- ☐ Illustrate and identify all low voltage outlet locations

- ☐ Provide a low voltage electrical riser diagram; include fire-stop details when penetrating a rated horizontal assembly
- ☐ Provide conductor/cable type; including wire gauge and insulation type
- ☐ Provide conduit type, size and conditions for use

- ☐ Clearly identify on the plans if any part of the low voltage will or will not be located in a plenum...
- ☐ Clearly identify on the plans if any part of the low voltage will or will not be penetrating a smoke rated assembly...
- ☐ Clearly identify on the plans if any part of the low voltage will or will not be penetrating a fire rated assembly...
- ☐ Clearly identify on the plans if any part of the low voltage is or is not a component of a fire alarm system...
- ☐ Clearly identify on the plans if any part of the low voltage is or is not a component of a fire detection system...
- ☐ Clearly identify on the plans if any part of the low voltage is or is not a component of a fire suppression system...
- ☐ Clearly identify on the plans if any part of the low voltage is or is not a component of a smoke control system...
- ☐ Clearly identify on the plans if any part of the low voltage is or is not a component of a fire protection supervisory system
- ☐ Clearly identify on the plans if any part of the low voltage is or is not a component of an elevator safety control system...
- ☐ Clearly identify on the plans if any part of the low voltage is or is not a component of an access control system...
- ☐ Clearly identify on the plans if any part of the low voltage is or is not a component of an egress control system...
- ☐ Clearly identify on the plans if any part of the low voltage is or is not a component of a delayed egress locking system...
- ☐ Clearly identify on the plans if any part of the low voltage is or is not a component of a delayed egress latching system...
- ☐ Clearly identify on the plans if any part of the low voltage is or is not a component of a door control system...
- ☐ Clearly identify on the plans if any part of the low voltage is or is not a component of a fire damper...

Fuel-Gas Systems:

- ☐ Provide a fuel-gas site plan drawn to no less than 1:20 scale, if applicable
- ☐ Illustrate on the fuel-gas site plan the connection to the onsite fuel-gas storage tank; indicate above ground or underground storage tank, size and type of fuel-gas; natural gas does not mandate site plan
- ☐ Illustrate on the fuel-gas site plan points of connection to the above-mentioned fuel-gas supply, the building and the path of the fuel-gas piping with minimum burial depth clearly indicated
- ☐ Indicate on the fuel-gas site plan the maximum develop length of the fuel-gas piping (tank to within 30" of building)
- ☐ Indicate on the fuel-gas site plan the maximum fuel-gas demand in cubic feet per hour
- ☐ Indicate on the fuel-gas site plan the piping material, piping ASTM numbers and size of piping
- ☐ Provide a detailed fuel-gas piping floor plan(s) drawn to no less than 1/8 inch scale
- ☐ Indicate the fuel-gas code edition that plans are designed in compliance with (VA USBC 2009)
- ☐ Illustrate and identify all fire resistance rated assemblies and the ratings; to include as a minimum rated partitions, rated walls, rated shaft enclosures, rated horizontal assemblies and rated exterior walls
- ☐ Provide approved fire-stop details for all penetrations to or through fire resistance rated assemblies
- ☐ Illustrate point of connection to fuel-gas supply
- ☐ Provide a single line fuel-gas riser diagram
- ☐ Indicate fuel-gas piping size(s) and all outlets
- ☐ Indicate fuel-gas piping material (type)
- ☐ Indicate fuel-gas piping ASTM numbers
- ☐ Indicate the type of fuel-gas
- ☐ If natural or undiluted propane indicate the method utilized for pipe sizing; longest length method or branch length method
- ☐ If natural or undiluted propane indicate the allowable pressure drop
- ☐ If natural or undiluted propane indicate the maximum design operating pressure
- ☐ If natural or undiluted propane indicate the specific gravity
- ☐ Indicate methods of support and bracing for fuel-gas piping
- ☐ Indicate location(s) and provide specifications for fuel-gas shutoff valves
- ☐ Provide fuel-gas equipment specifications to include input and output Btuh or Mbtu and mandated installation clearances
- ☐ Provide confined/unconfined space calculations and combustion air requirements
- ☐ Provide types, sizes, and clearances for draft hoods, vents, and vent connectors

Health Department

(Permit Processing Procedure)

According to Virginia State regulations, the Health Department is required to issue operating permits to certain establishments before they begin their operations. It is the responsibility of the applicant to secure approval from the health department before the Department of Public Works can release a permit for any of the following businesses:

- **Restaurants – Eat-In...**
- **Restaurants – Carry-Out...**
- **Any Place with ≥ 15 Seats for Eating (Examples: Shoppers Food or FasMart)**
- **Grocery Stores that will have Seating...**
- **Grocery Stores having Outside Cooking Events...**
- **Special Events Serving Food or Cooking on Site for the Event...**
- **Some Caterers such as Mobile Units – Exception being Professional Caterers...**
- **State Institution Food Service – Such as Jails or Juvenile Facilities...**
- **Hotels & Motels – Transient Lodging (Because Serving Continental Breakfasts)...**
- **All Mobile Units...**
- **All Schools...**
- **All Child Daycares – (Anything Involved with Social Services)...**
- **All Adult Daycares – (Anything Involved with Social Services)...**
- **Seasonal Camps...**
- **Swimming Pools by Compliant...**
- **Swimming Pools in Hotels & Motels...**

Note – Hair Salon & Nail Salons are Exempt – Under DPOR State Regulations...

~~~~~

**Stafford Environmental Health  
~ Rowser Building ~**

**Physical Address:**  
**1739 Jefferson Davis Highway**  
**Stafford, Virginia 22555**

**540-288-9018**  
**(Extension 108 & 109)**

**Mailing Address:**  
**PO Box 365**  
**Stafford, Virginia 22555**